

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Weissman et al.	Art Unit:	2163
Serial No.:	10/689,903	Examiner:	Helene Roberta Rose
Filed:	October 21, 2003	Conf. No.:	3982
Title:	METHODS AND SYSTEMS FOR DETERMINING A MEANING OF A DOCUMENT TO MATCH THE DOCUMENT TO CONTENT		

**Mail Stop Appeal Brief - Patents**

Commissioner for Patents  
P.O. Box 1450  
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**BRIEF ON APPEAL**

This Brief on Appeal perfects the Notice of Appeal filed herewith and appeals the rejections set forth in the Office action mailed June 27, 2007.

**(1) Real Party in Interest**

This case is assigned of record to Google Inc., who is the real party in interest.

**(2) Related Appeals and Interferences**

There are no known related appeals and/or interferences.

**(3) Status of Claims**

Claims 1-28, 30-31, and 36-40 are pending.

Claims 1-28, 30-31, and 36-40 are under consideration.

Claims 29 and 32-35 have been canceled.

Claims 1-28, 30-31, and 36-40 stand rejected.

Claim 1, 14, 28, and 36 are in independent form.

Claims 1, 2, 5, 14, 15, 18, 28, and 36 are involved directly in the appeal. Claims 3, 4, 6-13, 16, 17, 19-27, 30, 31, and 37-40 are not directly involved in the appeal but rather are involved only by virtue of their dependency from one or more of claims directly involved in the appeal.

**(4) Status of Amendments**

All claim amendments have been entered.

**(5) Summary of Claimed Subject Matter**

Applicants have developed systems and techniques for determining meanings of documents so that content can be matched to the documents. *See, e.g., specification*, page 1, line 19-21. The matching of content to a document can be used in Internet advertising. *See, e.g., specification*, page 2, line 6-7. For example, advertisements can be selected for display on web pages based on meanings of the web pages. *See, e.g., specification*, page 2, line 8-12. Such a matching of advertisements to documents can increase the effectiveness of the advertisement. *See, e.g., specification*, page 3, line 6-13. The following claims recite various aspects of matching content to documents.

For example, claim 1 relates to a method that includes:

receiving a source article (*See, e.g., specification*, page 9, line 4; page 11, line 13-14; page 15, line 20-22);

identifying a plurality of regions in the source article (*See, e.g., specification*, page 9, line 4-6; page 11, line 20-page 12, line 2; page 16, line 2-3; page 17, line 1-15);

determining at least one local concept expressed in each region (*See, e.g., specification*, page 9, line 4-6; page 12, line 2-3; page 14, line 11-13; page 17, line 16-page 18, line 13);

analyzing the local concepts of each region to identify one or more unrelated concepts (*See, e.g., specification*, page 9, line 11-14; page 12, line 7-11; page 14, line 13-19; page 18, line 14-page 19, line 4);

eliminating the unrelated concepts from a determination of a source meaning for the source article (*See, e.g., specification*, page 9, line 11-14; page 12, line 7-13; page 14, line 19-22; page 16, line 3-9; page 19, line 5-page 20, line 12); and

matching the source article with an item selected from a set of items based at least in part on a relationship between the source meaning and a meaning of the item. *See, e.g., specification*, page 1, line 20-21; page 4, line 2-3; page 5, line 9-10; page 8, line 2-4; page 9, line 14-16; page 12, line 14-page 13, line 2; page 21, line 3-page 21, line 18.

Claim 2 relates to the method of claim 1, further including displaying the matched item on the source article. *See, e.g., specification*, page 21, line 9-11.

Claim 5 relates to the method of claim 1, further including displaying content associated with the matched item on the source article. *See, e.g., specification*, page 21, line 11-12.

Claim 14 relates to an article that includes one or more computer-readable media containing program code operable to cause one or more machines to perform operations. The operations include:

receiving a source article (*See, e.g., specification*, page 9, line 4; page 11, line 13-14; page 15, line 20-22);

identifying a plurality of regions in the source article (*See, e.g., specification*, page 9, line 4-6; page 11, line 20-page 12, line 2; page 16, line 2-3; page 17, line 1-15);

determining at least one local concept expressed in each region (*See, e.g., specification*, page 9, line 4-6; page 12, line 2-3; page 14, line 11-13; page 17, line 16-page 18, line 13);

analyzing the local concepts of each region to identify one or more unrelated concepts  
(*See, e.g., specification*, page 9, line 11-14; page 12, line 7-11; page 14, line 13-19; page 18, line 14-page 19, line 4);

eliminating the unrelated concepts from a determination of a source meaning for the source article (*See, e.g., specification*, page 9, line 11-14; page 12, line 7-13; page 14, line 19-22; page 16, line 3-9; page 19, line 5-page 20, line 12); and

matching the source article with an item selected from a set of items based at least in part on a relationship between the source meaning and a meaning of the item. *See, e.g., specification*, page 1, line 20-21; page 4, line 2-3; page 5, line 9-10; page 8, line 2-4; page 9, line 14-16; page 12, line 14-page 13, line 2; page 21, line 3-page 21, line 18.

Claim 15 relates to the article of claim 14, wherein the operations further comprise displaying the matched item on the source article. *See, e.g., specification*, page 21, line 9-11.

Claim 18 relates to the article of claim 14, wherein the operations further comprise displaying content associated with the matched item on the source article. *See, e.g., specification*, page 21, line 11-12.

Claim 28 relates to a method that includes:  
accessing a source article (*See, e.g., specification*, page 15, line 1-2);  
identifying a first content region and a second content region in the source article (*See, e.g., specification*, page 15, line 2-3);

determining a first local concept expressed in the first content region and determining a second local concept expressed in the second content region (*See, e.g., specification*, page 15, line 3-5);

matching the first content region with a first advertisement from a set of advertisements based at least in part on the first local concept (*See, e.g., specification*, page 15, line 5-6);

matching the second content region with a second advertisement from the set of advertisements based at least in part on the second local concept (*See, e.g., specification*, page 15, line 7-8); and

displaying the matched advertisements on the source article. *See, e.g., specification*, page 21, line 9-11.

Claim 36 relates to a method that includes:

receiving a document (*See, e.g., specification*, page 9, line 4; page 11, line 13-14; page 15, line 20-22);

identifying a collection of different regions in the document (*See, e.g., specification*, page 9, line 4-6; page 11, line 20-page 12, line 2; page 16, line 2-3; page 17, line 1-15);

determining concepts expressed in each of the different regions in the collection (*See, e.g., specification*, page 9, line 4-6; page 12, line 2-3; page 14, line 11-13; page 17, line 16-page 18, line 13);

identifying a first concept expressed in a first region, wherein the first concept is unrelated to concepts expressed in other regions in the collection (*See, e.g., specification*, page 9, line 11-14; page 12, line 7-11; page 14, line 13-19; page 18, line 14-page 19, line 4);

excluding the first concept from a determination of a source meaning for the document (See, e.g., *specification*, page 9, line 11-14; page 12, line 7-13; page 14, line 19-22; page 16, line 3-9; page 19, line 5-page 20, line 12);

determining the source meaning for the document (See, e.g., *specification*, page 9, line 11-14; page 12, line 7-13; page 14, line 19-22; page 16, line 3-9; page 19, line 5-page 20, line 12); and

making the source meaning available to a user. See, e.g., *specification*, page 9, line 13-16.

**(6) Grounds of Rejection to be Reviewed on Appeal**

As set forth in the following concise statements, the following grounds for rejection are presented for review on appeal:

Ground 1: Whether claims 1-27 and 36-40 are properly rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.<sup>1</sup>

Ground 2: Whether claims 1-28, 30-31, and 36-40<sup>2</sup> are properly rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,484,161 to Chipalkatti et al. (hereinafter “Chipalkatti”).

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<sup>1</sup> Please note that the rejections under 35 U.S.C. § 101 set forth on page 3 of the Office action mailed June 27, 2007 merely identify that claims 1, 14, and 36 “(and their dependent claims, where applicable)” stand rejected under 35 U.S.C. § 101. However, 37 C.F.R. § 1.104 (a)(1) mandates that “examination shall be complete with respect both to compliance of the application ... with the applicable statutes and rules and to the patentability of the invention as claimed, as well as with respect to matters of form, unless otherwise indicated.” The failure of the June 27, 2007 Office action to indicate whether the claims dependent on claims 1, 14, and 36 are rejected not only fails to meet this mandate but also could potentially prevent applicant from entering an amendment, argument, and/or evidence prior to the close of prosecution in the application. Moreover, to advance the current appeal, applicant has assumed that dependent claims 2, 5, 15, and 18 are also rejected under 35 U.S.C. § 101.

<sup>2</sup> Please note that although the boldfaced heading on page 4, para. 7 of the Office action mailed June 27, 2007 only identifies that claims 1, 3-4, 6-28, 30-31, and 36-40 have been rejected under 35 U.S.C. § 102(e) as anticipated by Chipalkatti, pages 6-14 describe rejections of 1-28, 30-31, and 36-40. Accordingly, Applicant has assumed that the heading is incorrect.

**(7) Argument**

The organization of the arguments presented hereinafter follows the organization of the grounds for rejection to be reviewed on appeal set forth above. In particular, a separate boldfaced heading for each ground presented for review follows.

**Ground 1: Rejections under 35 U.S.C. § 101**

Claim 2 was rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. As best understood, the rejection contends that the recited method does not produce a “useful, concrete and tangible result.” *See Office action mailed June 27, 2007*, page 3.

Applicant respectfully disagrees. Claim 2 recites that a matched item is displayed on a source article. Applicant respectfully submits that the display of an item on an article is not only useful, concrete and tangible, but also inherently requires a physical transformation (i.e., the display).

Accordingly, claim 2 recites statutory subject matter. Applicant respectfully requests that the rejection of claim 2 under 35 U.S.C. § 101 be withdrawn.

Claim 5 was rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. As best understood, the rejection contends that the recited method does not produce a “useful, concrete and tangible result.” *See Office action mailed June 27, 2007*, page 3.

Applicant respectfully disagrees. Claim 5 recites that content associated with a matched item is displayed on a source article. Applicant respectfully submits that the display of tent associated with a matched item on an article is not only useful, concrete and tangible, but also inherently requires a physical transformation (i.e., the display).

Accordingly, claim 5 recites statutory subject matter. Applicant respectfully requests that the rejection of claim 5 under 35 U.S.C. § 101 be withdrawn.

Claim 14 was rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. As best understood, the rejection contends that the recited article claims nonfunctional descriptive material. *See Office action mailed June 27, 2007*, page 3.

Applicant respectfully disagrees. As discussed in the Interim Guidelines for Examination of Patent Applications, “functional descriptive material” consists of data structures and computer programs which impart functionality when employed as a computer component. “Nonfunctional descriptive material” includes but is not limited to music, literary works and a compilation or mere arrangement of data.

Claim 14 relates to an article that includes one or more computer-readable media containing program code operable to cause one or more machines to perform operations. Program code that is operable to cause a machine to perform operations impart functionality when employed as a computer component and hence constitute functional descriptive material.

Accordingly, the present rejection of claim 14 is improper. Applicant respectfully requests that the rejections of claim 14 and the claims dependent therefrom under 35 U.S.C. § 101 be withdrawn.

Claim 15 was rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. As best understood, the rejection contends that the recited article claims nonfunctional descriptive material. *See Office action mailed June 27, 2007*, page 3. No alternative basis for the rejection has been set forth.



Applicant respectfully disagrees with the rejection. Claim 15 relates to functional descriptive material that is operable to cause a machine to perform operations, including displaying a matched item on a source article. Applicant respectfully submits that the display of an item on an article is not only useful, concrete and tangible, but also inherently requires a physical transformation (i.e., the display).

Accordingly, claim 15 recites statutory subject matter. Applicant respectfully requests that the rejection of claim 15 under 35 U.S.C. § 101 be withdrawn.

Claim 18 was rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. As best understood, the rejection contends that the recited article claims nonfunctional descriptive material. *See Office action mailed June 27, 2007*, page 3. No alternative basis for the rejection has been set forth.

Applicant respectfully disagrees with the rejection. Claim 18 relates to functional descriptive material that is operable to cause a machine to perform operations, including displaying content associated with matched items on a source article. Applicant respectfully submits that the display of content on an article is not only useful, concrete and tangible, but also inherently requires a physical transformation (i.e., the display).

Accordingly, claim 15 recites statutory subject matter. Applicant respectfully requests that the rejection of claim 15 under 35 U.S.C. § 101 be withdrawn.

**Ground 2: Rejections under 35 U.S.C. § 102(e)**

Claims 1 and 14 were rejected under 35 U.S.C. § 102(e) as anticipated by Chipalkatti.

As discussed above, Applicants have developed systems and techniques for determining meanings of documents so that content can be matched to the documents. For example, claims 1 and 14 recite that a source article can be matched with an item based at least in part on a relationship between a source meaning and a meaning of the item.

However, Chipalkatti does not relate to the matching of a source article with an item. Rather, Chipalkatti is concerned with processing data queries in a distributed computer system. *See, e.g., Chipalkatti*, Abstract. While applicant recognizes that Chipalkatti's different field of use does not foreclose Chipalkatti from anticipating the recited subject matter, applicant also submits that the present rejections are so tortured and logically inconsistent as to fail to establish anticipation.

In this regard, as discussed above, claims 1 and 14 recite that a source article is received, a plurality of regions in the source article are identified, a determination of a source meaning for the source article occurs, and the source article is matched with an item. The rejections of claims 1 and 14 point to a variety of different elements in Chipalkatti as allegedly constituting such a source article. For example, the rejections of claims 1 and 14 successively contend that:

- data "delivered to the user's browser" in response to an incoming query request constitutes a source article (*see Office Action mailed June 27, 2007*, page 4, final paragraph);

- searched databases constitute a source article (*see id.*, page 5, first paragraph (contending that the objects returned during a search of Chipalkatti's databases constitute a plurality of regions that are identified in the source article); and

-a query constitutes a source article. *See id.*, page 6, second full paragraph (contending that matching a query to a set of categories constitutes the matching of a source article with an item selected from a set of items).

Thus, the rejections of claims 1 and 14 both torture the plain meaning of the term "source article" and are logically inconsistent. Such rejections not only fail to establish anticipation, they also do not allow Applicant to judge the propriety of continuing prosecution, as required by 35 U.S.C. § 132 and 37 C.F.R. § 1.104(2). This may potentially prevent applicant from entering an amendment, argument, and/or evidence prior to the close of prosecution in the application.

Nevertheless, applicant in good faith will now attempt to respond to Chipalkatti as a basis for the rejections. Chipalkatti deals with an on-line query tool. *See, e.g., Chipalkatti*, col. 1, line 33-35. The query tool performs queries or searches upon an existing database. *See, e.g., Chipalkatti*, col. 1, line 40-45. In Chipalkatti's system, a query request is received from a user over a user interface (namely, the GTE Superpages Internet site), routed to a server, and used to perform a data query on business listings in a primary database 812 and a secondary database 814. *See, e.g., Chipalkatti*, col. 2, line 5-15. Primary database 812 and secondary database 814 differ in the extent to which the business listings therein are normalized. *See, e.g., Chipalkatti*, col. 14, line 61 – col. 15, line 42. Such differences in normalization are illustrated in FIG. 26, 27 of Chipalkatti, which illustrate the different representations of relations along with address/e-mail/telephone number data. *See, e.g., Chipalkatti*, FIGS. 26, 27. As pointed out by Chipalkatti, such differences in normalization impact the performance and flexibility of a database. *See, e.g., Chipalkatti*, col. 15, line 13-16; col. 20, line 24-27.

The business listings in databases 812, 814 are associated with categories. *See, e.g., Chipalkatti*, col. 9, line 46-50. The categories are returned in the result sets of business listings responsive to search queries. *See, e.g., Chipalkatti*, col. 20, line 56-62. Chipalkatti describes that the categories of business listings can be compared to the terms in the original user query and, if categories are present that do not include any of the terms in the user query, then the business listings in such categories may be discarded. *See, e.g., Chipalkatti*, col. 34, line 40-45. This prevents the user from retrieving categories that are unrelated to the query. *See, e.g., Chipalkatti*, col. 34, line 45-46.

At least a portion of the rejections contend that this discard of business listings in certain categories constitutes an elimination of unrelated concepts from a determination of a source meaning for a source article, as recited in claims 1 and 14. *See Office Action mailed June 27, 2007*, page 5, final paragraph. Applicant disagrees on several bases.

For example, applicant respectfully submits that one of ordinary skill would not reasonably consider a business listing to be a concept. The term “concept” has a meaning that is understood to those in the linguistic and related arts. *See, e.g., specification*, page 9, line 6-11. The discard of a business listing thus does not constitute the elimination of unrelated concepts, as recited.

As another example, applicant submits that one of ordinary skill would not reasonably consider the identification of business listings in categories that include the terms in a user query to be a determination of a source meaning for a source article. Business listings in certain categories do not constitute a source meaning for a source article. For example, one of ordinary skill would not reasonably consider a collection of business listings to constitute a “meaning.”

In summary, it is well-established that anticipation requires the identical invention to be shown in as complete detail as is recited in the claim. *See Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). When the rejection tortures the language and is based on a series of logically inconsistent propositions that rely upon designating different elements of a system to meet the elements and limitations recited in a claim, this standard has not been met.

Accordingly, claims 1 and 14 are not anticipated by Chipalkatti. Applicant respectfully requests that the rejections of claims 1, 14, and the claims dependent therefrom, be withdrawn.

Claims 2 and 15 were rejected under 35 U.S.C. § 102(e) as anticipated by Chipalkatti.

As discussed above, claims 2 and 15 recite that matched items are displayed on a source article. The present rejection points to yet another element in Chipalkatti as constituting a “source article,” namely, the user interface shown in FIG. 44. *See Office Action mailed June 27, 2007*, page 5, third paragraph. Applicant respectfully submits that it one of ordinary skill would not reasonably consider a user interface to constitute a source article. Moreover, Applicant respectfully submits that Chipalkatti neither describes nor suggests a determination of a source meaning for the user interface shown in FIG. 44.

Accordingly, claims 2 and 15 are not anticipated by Chipalkatti. Applicant respectfully requests that the rejections of claims 2, 15, and the claims dependent therefrom, be withdrawn.

Claim 28 was rejected under 35 U.S.C. § 102(e) as anticipated by Chipalkatti.

As discussed above, claim 28 recites that first and second content regions are identified in a source article, that local concepts expressed in the first and second content regions are determined, that the first content region is matched with a first advertisement, and that the second content region is matched with a second advertisement.

The rejection of claim 28 points to a variety of different elements in Chipalkatti as allegedly constituting first and second content regions in a source article. For example, as best understood, the rejection of claim 28 successively contends that:

- portions of the GTE Superpages Internet site constitute first and second content regions (*see Office Action mailed June 27, 2007*, page 10, final two paragraphs);

- one of a field in an update record and a field in an existing database constitute first and second content regions (*see id.*, page 11, first paragraph (pointing to Chipalkatti's comparisons between update records and existing databases as involving a first content region); and

- a query. *See id.*, page 11, second full paragraph (contending that matching a query to a set of categories constitutes the matching of a first content region with first advertisement).

Thus, the rejection of claim 28 both tortures the plain meaning of the terms "content region" and are logically inconsistent. Such a rejection not only fails to establish anticipation, it also does not allow Applicant to judge the propriety of continuing prosecution, as required by 35 U.S.C. § 132 and 37 C.F.R. § 1.104(2). This may potentially prevent applicant from entering an amendment, argument, and/or evidence prior to the close of prosecution in the application.

Nevertheless, as before, applicant in good faith will now attempt to respond to Chipalkatti as a basis for the rejection. As discussed above, Chipalkatti deals with an on-line query tool that receives a query request from a user over a user interface and performs a data query on business listings in databases 812, 814. The business listings in databases 812, 814 are associated with categories that are returned in the result sets. The categories of business listings can be compared to the terms in the original user query and, if categories are present that do not include any of the terms in the user query, then, such categories may be discarded. The

remaining result set of business listings can be presented to a user. *See, e.g., Chipalkatti*, col. 110, line 28-34. A user can select one of the business listings, and additional information related to the selected listing, including advertisements, can be displayed. *See, e.g., Chipalkatti*, col. 110, line 34-37.

As best understood, the rejection is based on the contention that the display of advertisements on Chipalkatti's GTE Superpages Internet site constitutes the display of advertisements matched to first and second content regions on a source article. *See Office Action mailed June 27, 2007*, page 11, fourth paragraph.

Applicant respectfully disagrees. Claim 28 recites that advertisements are matched to the first and second content regions based at least in part on local concepts expressed in the respective content region. One of ordinary skill would not reasonably consider that whatever regions do exist in Chipalkatti's GTE Superpages Internet site to express local "concepts." Moreover, Chipalkatti does not provide any clues as to how any local concepts expressed in the such regions are determined.

Accordingly, claim 28 is not anticipated by Chipalkatti. Applicant respectfully requests that the rejections of claim 28, and the claims dependent therefrom, be withdrawn.

Claim 36 was rejected under 35 U.S.C. § 102(e) as anticipated by Chipalkatti.

As discussed above, claim 36 recites that a document is received, that different regions in the document are identified, that concepts expressed in the different regions in the document are determined, and that a source meaning for the document is determined.

The rejection of claim 36 points to a variety of different elements in Chipalkatti as allegedly constituting the recited document.

For example, the rejection of claim 36 successively contend that:

-data “delivered to the user’s browser” in response to an incoming query request constitutes a document (*see Office Action mailed June 27, 2007*, page 12, third paragraph (*citing id.*, page 4, final paragraph));

-a data query cache constitutes a document (*see id.*, page 12, fourth paragraph (contending that business listings stored in data query cache 250 constitute regions in a document));

-a query constitutes a document. *See id.*, page 13, second full paragraph (contending that matching a query to a set of categories constitutes determining a source meaning for a document).

Thus, the rejection of claim 36 both tortures the plain meaning of the term “document” and is logically inconsistent. Such a rejection not only fail to establish anticipation, is also does not allow Applicant to judge the propriety of continuing prosecution, as required by 35 U.S.C. § 132 and 37 C.F.R. § 1.104(2). This may potentially prevent applicant from entering an amendment, argument, and/or evidence prior to the close of prosecution in the application.

Nevertheless, applicant in good faith will now attempt to respond to Chipalkatti as a basis for the rejections. As discussed above, Chipalkatti deals with an on-line query tool that receives a query request from a user over a user interface and performs a data query on business listings in databases 812, 814. The business listings in databases 812, 814 are associated with categories that are returned in the result sets. The categories of business listings can be compared to the terms in the original user query and, if categories are present that do not include any of the terms



in the user query, then, such categories may be discarded. The remaining result set of business listings can be presented to a user.

At least a portion of the rejection of claim 36 contends that this discard of business listings in certain categories constitutes an exclusion of a first concept from a determination of a source meaning for the document, as recited in claim 36. *See Office Action mailed June 27, 2007*, page 13, first paragraph. Applicant disagrees on several bases.

For example, applicant respectfully submits that one of ordinary skill would not reasonably consider a business listing to be a concept. The term “concept” has a meaning that is understood to those in the linguistic and related arts. *See, e.g., specification*, page 9, line 6-11. The discard of a business listing thus does not constitute the exclusion of concept, as recited.

As another example, applicant submits that one of ordinary skill would not reasonably consider the identification of business listings in categories that include the terms in a user query to constitute a determination of a source meaning for a source article. Business listings in certain categories do not constitute a source meaning for a source article. For example, one of ordinary skill would not reasonably consider a collection of the business listings to constitute a “meaning.”

In summary, it is well-established that anticipation requires the identical invention to be shown in as complete detail as is recited in the claim. *See Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989). When the rejection tortures the language and is based on a series of logically inconsistent propositions that rely upon designating different elements of a system to meet the elements and limitations recited in a claim, this standard has not been met.

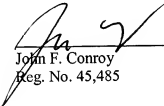
Accordingly, claim 36 is not anticipated by Chipalkatti. Applicant respectfully requests that the rejections of claims 36 and the claims dependent therefrom be withdrawn.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Please apply the brief fee, appeal fee and extension of time fee and any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: October 29, 2007



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### **Appendix of Claims**

1. A method comprising:

receiving a source article;

identifying a plurality of regions in the source article;

determining at least one local concept expressed in each region;

analyzing the local concepts of each region to identify one or more unrelated concepts;

eliminating the unrelated concepts from a determination of a source meaning for the

source article; and

matching the source article with an item selected from a set of items based at least in part on a relationship between the source meaning and a meaning of the item.

2. The method of claim 1, further comprising displaying the matched item on the source article.

3. The method of claim 2, wherein:

the source article comprises a web page; and

the matched item comprises a keyword.

4. The method of claim 2, wherein:

the source article comprises a web page; and

the matched item comprises an advertisement.

5. The method of claim 1, further comprising displaying content associated with the matched item on the source article.

6. The method of claim 5, wherein:

the source article comprises a web page;

the matched item comprises a keyword; and

the associated content comprises an advertisement.

7. The method of claim 5, wherein:

the source article comprises a first web page;

the matched item comprises a second web page; and

the associated content comprises an advertisement.

8. The method of claim 5, wherein:

the source article comprises a first web page;

the matched item comprises a second web page; and

the associated content comprises a link to the second web page.

9. The method of claim 1, wherein matching the source article with the item comprises matching the source article with the item using a biasing factor.

10. The method of claim 1, wherein the source meaning comprises a vector of weighted concepts.

11. The method of claim 1, wherein:

determining at least one local concept comprises determining a score for each local concept; and

the local concept with the highest score in each region comprises a most relevant local concept for that region.

12. The method of claim 11, wherein identifying unrelated regions comprises:

- determining a revised score for each local concept ;
- determining a ranked global list of all local concepts based on the revised scores;
- removing local concepts whose combined revised score contributes less than a predetermined amount of a total score of the global list to produce a resulting list;
- identifying unrelated regions without a most relevant local concept on the resulting list;

and

- removing local concepts expressed in the unrelated regions from the resulting list to produce a list of relevant concepts.

13. The method of claim 12, wherein determining the source meaning comprises normalizing the revised scores for the relevant concepts.

14. An article comprising one or more computer-readable media containing program code operable to cause one or more machines to perform operations, the operations comprising:

- receiving a source article;
- identifying a plurality of regions in the source article;
- determining at least one local concept expressed in each region;
- analyzing the local concepts of each region to identify unrelated concepts;
- eliminating the unrelated concepts from a determination of a source meaning for the source article; and

matching the source article with an item selected from a set of items based at least in part on a relationship between the source meaning and a meaning of the item.

15. The article of claim 14, wherein the operations further comprise displaying the matched item on the source article.

16. The article of claim 15, wherein:  
the source article comprises a web page; and  
the matched item comprises a keyword.

17. The article of claim 15, wherein:  
the source article comprises a web page; and  
the matched item comprises an advertisement.

18. The article of claim 14, wherein the operations further comprise displaying content associated with the matched item on the source article.

19. The article of claim 18, wherein:  
the source article comprises a web page;  
the matched item comprises a keyword; and  
the associated content comprises an advertisement.

20. The article of claim 18, wherein:  
the source article comprises a first web page;  
the matched item comprises a second web page; and  
the associated content comprises an advertisement.

21. The article of claim 18, wherein:

the source article comprises a first web page;

the matched item comprises a second web page; and

the associated content comprises a link to the second web page.

22. The article of claim 14, wherein matching the source article with the item comprises matching the source article with the item using a biasing factor.

23. The article of claim 14, wherein the source meaning comprises a vector of weighted concepts.

24. The article of claim 14, wherein eliminating the unrelated concepts comprises ranking the related local concepts.

25. The article of claim 1, wherein:

determining at least one local concept comprises determining a score for each local concept; and

the local concept with the highest score in each region comprises a most relevant local concept for that region.

26. The article of claim 25, wherein identifying unrelated regions comprises:

determining a revised score for each local concept;

determining a ranked global list of all local concepts based on the revised scores;

removing local concepts whose combined revised score contributes less than a predetermined amount of a total score of the global list to produce a resulting list;

identifying unrelated regions without a most relevant local concept on the resulting list;  
and

removing local concepts expressed in the unrelated regions from the resulting list to  
produce a list of relevant concepts.

27. The article of claim 26, wherein determining the source meaning comprises  
normalizing the revised scores for the relevant concepts.

28. A method comprising:  
accessing a source article;  
identifying a first content region and a second content region in the source article;  
determining a first local concept expressed in the first content region and determining a  
second local concept expressed in the second content region;  
matching the first content region with a first advertisement from a set of advertisements  
based at least in part on the first local concept;  
matching the second content region with a second advertisement from the set of  
advertisements based at least in part on the second local concept; and  
displaying the matched advertisements on the source article.

29. (Canceled)

30. The method of claim 28, wherein displaying the matched advertisements comprises:  
displaying the first advertisement in the first content region; and  
displaying the second advertisement in the second content region.



31. The method of claim 28, wherein the source article comprises a web page.

Claims 32.-35. (Canceled)

36. A method comprising:

receiving a document;

identifying a collection of different regions in the document;

determining concepts expressed in each of the different regions in the collection;

identifying a first concept expressed in a first region, wherein the first concept is  
unrelated to concepts expressed in other regions in the collection;

excluding the first concept from a determination of a source meaning for the document;

determining the source meaning for the document; and

making the source meaning available to a user.

37. The method of claim 36, wherein identifying the collection of different regions in the  
document comprises identifying frames in a web page document.

38. The method of claim 36, wherein identifying the collection of different regions in the  
document comprises identifying the different regions based on markup in the document.

39. The method of claim 36, wherein determining concepts comprises identifying  
collections of related words in each of the different regions in the collection.

40. The method of claim 36, further comprising:

based on the concepts expressed in each of the different regions in the collection,

selecting one or more advertisements; and

making the document and the selected advertisements available for output to a user.

Applicant: Weissman et al.  
Serial No.: 10/689,903  
Filed: October 21, 2003  
Page: 27 of 28

Attorney's Docket No.: 16113-329001 / GP-137-00-US

### **Evidence Appendix**

None.

Applicant: Weissman et al.  
Serial No.: 10/689,903  
Filed: October 21, 2003  
Page: 28 of 28

Attorney's Docket No.: 16113-329001 / GP-137-00-US

### **Related Proceedings Appendix**

None.